



THOMAS G. NEWMAN,
EDITOR.

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Editorial Buzzings.

And Now the Sun in glory shines,
Dispelling clouds of sorrow;
But do not take your flannels off,
It may not shine to-morrow.

Uniformity of sections and crates should now be discussed freely.

Hon. R. L. Taylor, of Lapeer, Mich., has been suffering from the effects of *La Grippe* ever since April 1. Since that he has been confined in bed most of the time. We are much pleased to be able to say that he is now recovering, and we hope will soon be himself again.

Haldimand Bee-Keepers will meet at Nelles' Corners, on Saturday, May 16, at 11 a.m., when the following subjects will be taken up: 1. Report of Wintering; 2. Natural vs. Artificial Swarming; 3. Spreading Brood-Nests to Stimulate Breeding; 4. How to Rear Good Queens? E. C. Campbell is the Secretary.

We Breathe More Freely since reading the following item from the Signal Service reports concerning the damage done to crops in Michigan by the frosts of last week. We hope that all danger is now past, and that no further trouble need be feared. The item reads thus:

An investigation has been made of the effects of frosts on May 5 and 6. The fruit belt of Western Michigan is said to have received little injury; though the damage has been serious, especially to small fruits and vegetables, in other parts of Michigan. Nearly all unite in saying that no injury to the growing crops has occurred.

Tariff on Queens.—Prof. A. J. Cook writes as follows on this matter:

Should not the Bee-Keepers' Union act at once on this matter of tariff on queens? The McKinley bill makes the duty on all animals 20 per cent. Bees are animals. Breeding animals are exempt. Thus queens would be free. But this exemption only comes through various certificates, etc. And each importer not having these papers, and not daring to leave his importations in the Custom House, must pay the duty.

Now, I suggest that as all queen-bees come assuredly within the spirit of the law, the Bee-Keepers' Union move at once to secure from the Secretary of the Treasury a ruling admitting all queens free of duty without any fuss or feathers. I believe a proper showing will secure this action. I am receiving various complaints (one very loud one) regarding this matter. The law certainly works great wrong, and I hope we may get a modification through such a ruling as suggested above, that will remove the burden from our importers. Is not this worth an effort?—A. J. Cook.

Most assuredly it is worth the effort, and the General Manager of the National Bee-Keepers' Union has written to the Secretary of the Treasury, pleading for the bees, and asking for a ruling from the Treasury Department, admitting the queen-bees for breeding purposes free of duty, without any unnecessary red tape, as they did under the old law on exemptions. As soon as an answer is received, we will let our readers know the result.

Duty on Imported Queens.

It seems that we are again in trouble concerning the importation of queen-bees. The new "McKinley Tariff" has saddled upon us an import duty of 20 per cent. *ad valorem*, and from this there now seems to be no escape except by special legislation of Congress, which will require time, and considerable labor and expense.

The person who drafted the bill probably never thought about bees being in law classed as "live animals," but they are so classed at the Custom House, and a duty of 20 per cent. is to be demanded on them when imported into this country.

It is true that we might have them exempted under the provision for "the importation of animals for breeding purposes," but that matter is so hedged about with "regulations" with which apiarists cannot comply (such as "giving their pedigree," etc.) that it would be useless to attempt it.

Again, the Deputy Collector at New York claims that "the importation of bees through the mails is prohibited."

We would like to ask, "Since when?" For years past they have been allowed to be received from Italy, and we have not seen any new regulation or law prohibiting their reception. The Deputy Collector no doubt erred in making that statement, and we expect it to be promptly corrected at headquarters.

That our readers may be posted on the whole subject, we append the following correspondence which appeared in *Gleanings* for this month:

Mr. W. C. Frazier, of Atlantic, Iowa, recently wrote us, asking whether there was a duty on imported queens. We replied to the effect that there was none, because queen-bees were used for breeding purposes, and therefore exempt. It seems that Mr. Frazier was not entirely satisfied, and so he wrote to the Deputy Collector of Customs, in New York, in regard to the matter. His reply is as follows:

CUSTOM HOUSE, NEW YORK,
COLLECTOR'S OFFICE, April 2, 1891.

W. C. Frazier, Esq., Atlantic, Iowa:

Sir:—In reply to your letter of the 30th ult., I have to say that "bees" would be classified as "live animals" upon importation, dutiable at 20 per cent. *ad valorem*, under N. T., 251. Animals imported specially for breeding purposes are exempt from duty under N. T., 482, upon compliance with the requirements of the law and treasury regulations—to-wit, production of a duly authenticated invoice—certificate of identification sworn to by the importer—certificate or score and pedigree, authenticated by the proper custodian of the book of record established for the breed in question, and report of the apiarian after examination. The importation of "bees" through the mails from Italy is prohibited by law, and, if so imported, they would be liable to fine and seizure.

Respectfully yours,

H. D. STANWOOD,
Deputy Collector.

We thought there must be some mistake, and, if so, Prof. Cook was just the man to see that the matter were set right, as he had, in years gone by, handled successfully the transmission of queens through the mails. He wrote to his friend and former co-worker of the Michigan Agricultural College, Edwin Willits, now Acting Secretary of the Department of Agriculture, Washington, D. C.; and his reply, which Prof. Cook has very kindly forwarded on to us, is as below:

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
WASHINGTON, D. C.

Prof. A. J. Cook:—Yours of the 6th inst. is at hand, relative to the bee-question and the importation of queen-bees from Italy, upon which, under the new tariff, they charge 20 per cent. duty. I have written to the Secretary of the Treasury this day, inclosing a copy of the correspondence, and asking him if it is possible for him to make a ruling that shall let bees come in free of duty.

There is no question but that bees should be classified under the new Tariff Act, as animals; and the general law is, that the duty on imported animals shall be 20 per cent., under Section 251 of the Tariff Act; but in the free list, under Section 482, any animal imported specially for breeding purposes shall be let in free; and then comes the proviso, which is, in substance, that, in order to relieve the importation from the duty, it shall conform to the requirement

stated in the Deputy Collector's letter. It is very manifest, that the person who drafted the proviso, had in his eye only domestic animals, and had no thought of any other animals, and, in fact, no thought of bees, or that bees would be called "animals." I am afraid that the proviso is so restricted that the Secretary of the Treasury will have no discretion. However, I have asked him to see whether he can give it some construction that will help us out.

EDWIN WILLITS, *Acting Secretary.*

Accompanying this letter from the Secretary was one from Prof. Cook, which we produce herewith:

Dear Friend Root:—This looks bad. We have a friend "in court" who will do all that is possible for us. It will be bad if we have to wait for special legislation.

A. J. Cook.

Agricultural College, Mich., April 24.

It looks as though we should have to submit to the inevitable until special legislation can be enacted in our behalf. As the Acting Secretary says: "The person who drafted the proviso had in his eye only domestic animals." Perhaps I should add further, that the Deputy Collector has probably made an error in regard to bees through the mails. They are not prohibited by law. The January Postal Guide for 1891 gives a list of the European countries to which queen-bees may be sent, and in that list is Italy. It would be a little strange if, reciprocally, Italy could not send any queens to us. If she cannot, it is a very recent enactment of the postal magnates. We will have the law tested again at an early date.

Trouble About Bees.

A neighbor of Mr. Elbert Greeley, at Lorain, O., circulated a petition, asking the City Council to pass an ordinance to prohibit the keeping of bees in the city. Mr. Greeley writes us as follows on the matter:

At a meeting of the Town Council, held on April 20, a petition signed by several citizens, asking that steps be taken to abate a certain bee-nuisance, was referred to a committee for investigation.

At the next meeting, the committee reported that they had investigated the matter by visiting near neighbors and obtaining their views on the question, and while many claimed that there was

no cause for complaint, others contended that there was, and stated their grievances.

The report was accepted, and the committee discharged, the Council deciding that it would be unjust to declare the bees in question a nuisance, while there were other places in the town where bees were kept, against which there had been no complaint.

I do not know what move my neighbor may make next, but understand that he will sue me for damages, claiming that my bees prevent him from renting his house, which is located on the adjoining lot.

There are a number of others in the town (population about 5,000) who keep bees, but no word of complaint has been uttered about any bees but mine, and one man has about the same number as myself—40 colonies.

Some of the signers of the petition for the removal of the bees have told me they would never have signed the petition had they known it was spite work.

Mr. France is right about the Bee-Keepers' Union. No bee-keeper knows when he may be called upon to defend himself in court, against the attack of some spiteful neighbor, who thinks to injure him through his bees. Therefore, I say, join the Union at once; do not delay.

I think the Union should have a cipher, for use by telegraph, in case of emergency. In my case the petition was only circulated three or four days before the meeting of the new Council, giving me no chance to defend myself. I also think that every member of the Union should have a copy of the By-Laws.

ELBERT GREELEY.

Lorain, O., May 4, 1891.

The Council took the wisest course in its disposition of the petition, as, from the evidence at hand, it appears to have had its origin in a spirit of petty malice. Common justice demanded that Mr. Greeley's bees should not be declared a nuisance, and ordered removed from the city limits while bees kept by others, within the limits of the same city, were not even mentioned.

The Constitution of the Bee-Keepers' Union has been published in the BEE JOURNAL, and also in the Annual Report for the last two years, a copy of which is sent to every member. There are no By-Laws.

Alley's Self-Hiver.—It is said that "The proof of the pudding is in chewing the string." The practical test of any utensil is the best proof of its utility. Mrs. Sallie E. Sherman, Salado, Texas, sends the first report for 1891, concerning the use of this self-hiver, and this is what she says:

On Saturday, March 28, 1891, I placed one of Mr. Alley's self-hivers at the entrance of a hive from which I knew the bees would swarm in a few days; near this hive was one prepared to receive the swarm when it issued. On Sunday afternoon about 4 o'clock, when walking through the apiary, I saw the bees at work in the new hive. They had swarmed and hived themselves, and were working nicely, without any assistance whatever on my part, except to make the necessary preparation for them. This self-hiver will certainly be a wonderful help to bee-keepers. Mr. Alley, the inventor, should receive not only the heartfelt thanks of all who are interested in bee-keeping, but something more substantial in the way of our liberal patronage.

By the use of the drone-trap and queen-cage combined, which was invented by the same gentleman, I secured 48 swarms out of 49, in 1888, without so much as having to cut a single twig in hiving them.

MRS. SALLIE E. SHERMAN.

Marine, a village of Madison Co., Ills., is agitated about bees. A man moved into that locality two years ago, and is now circulating a petition asking to have the bees removed. We have been informed that it is simply "spite-work." There are several bee-keepers in that locality, the principal one being Mr. M. Hettel, who has kept bees there for 26 years. The authorities have been dosed with the decision of "the Supreme Court of Arkansas." We hope that will cure the foolishness.

We are Sorry to learn by last week's *Canadian Bee Journal* that Mr. Macpherson, assistant editor of that periodical, is no better. The accident seems to have been much more serious than was at first supposed.

Larger Worker Bees are advocated by C. W. Smith, in the *Apticulturist*. He says:

I do believe that by care and skill in selecting our queens, and close attention to the conditions necessary for the reproduction of young, such as plentiful feeding, and new brood-combs *made by the bees*, and *renewed each year* (oftener if I could), we shall approach the time when all the drones will be in prime physical condition to mate our young queens, and that by following this method we may look for a larger *worker-bee* in the near future. The fact that the present Italian bee travels *farther* and faster, and gathers more honey than the common small black bee, and that their size is what enables them to do so, demonstrates that this is the road to follow.

Double the size of the worker-bee—if we can increase its size by only a trifle, and that trifle on the *end* of its proboscis; then the red clover is at our command, and that means more than double our honey crop.

Here is a hint for the queen-breeders, who will doubtless give it attention. They have been breeding larger queens, finer and more beautiful drones, and now should try their hands at the production of *larger worker-bees*. If they can give us the bees having tongues long enough to gather the wealth of nectar in the red clover, there will hardly be any limit to the honey that can be produced. Let us hear from queen-breeders on this subject.

Cooking Eggs.—Dr. C. C. Miller describes the way they boil eggs at his house thus:

Pour *boiling* water on the eggs, at the rate of a quart to a half dozen; *cover*, and set on the reservoir. In 10 or 15 minutes the yolk will be done "soft," and longer will make it harder; but the white will not get hard in all day.

Comb-Honey is more of a luxury than a staple article, and we do not believe that the reduction of the price of sugar will affect its price to any particular extent.

BIOGRAPHICAL.

JAMES A. GREEN.

The subject of this sketch, while still in his teens, decided to make the road leading through the apiary his royal road to fortune. Giving to his chosen profession the close study and hard work always necessary to make a success of any profession, bringing to it the stimulus of a decided taste for bee-keeping, and a natural aptitude for its details, he is likely, before he is much older, to find "plenty of room at the top."

Mr. Green was born about thirty years ago in the little town of Dayton, on the banks of Fox River, in Illinois. While he has built up an extensive business, and quite a national reputation among bee-keepers, this town always has been and continues to be his home.

His practical experience with bees began in 1878, during the absence of his father, who was at that time a bee-keeper on a small scale. Swarming time came on, the colonies needed attention, and James and his mother stepped promptly into the breach. All went well with the experiment; and when Mr. Green returned from Colorado, the boy had found his vocation.

He began with 20 colonies of bees in box-hives. He found it hard to gather information about his new business, and, for lack of this knowledge, carried it on for some time in a primitive way, which the modern bee-keeper would consider very antiquated. But James was a very determined boy, and he did not believe there was any need of standing still or going back because the way ahead looked rather difficult. So he diligently read on, gathering from books and magazines some knowledge, and a little insight into the ways of bees. At last, in the *A B C of Bee-Culture*, he found the solution of his difficulties. James learned his *A B C's* thoroughly, and henceforth his upward path became comparatively easy.

"Progressive and determined" make a very good combination, and this boy had both qualities. Gradually the old-fashioned methods and appliances gave place to new, improved, and scientific ones. The ingenious hand of the master of the bee-yard supplemented his tools with handy contrivances of his own, and the apiary grew and grew

until now, 1891, it numbers 300 colonies, and its product goes to many of the great cities of the country.

More than this, while Mr. Green is still, and always will be, a student, his knowledge of bees and their culture is so wide, accurate, and practical, that he takes rank among the best authorities in these matters. His name was recently sent by the Secretary of the Smithsonian Institute for admission to one of the great scientific societies of France—a high honor for so young a man who has been only eleven years in the work.

Back of every good man is a good mother. Back of nearly every successful man is a sympathetic mother or



James A. Green.

wife. Mr. Green is not an exception to this rule. From their babyhood, Mrs. Green took an interest in all that her boys cared to do—an interest no less wise and thoughtful than it was devoted. Each boy felt that mother was his particular partner, giving an intelligent appreciation to all the details of his boyish plans for the future, and sympathizing with his ups and downs.

When Frank, the chemist, hid his beloved bottles on the high shelf of the dining-room cupboard, mother did not scold, nor ever ask to have them taken away. She only told Frank to be very careful how near he placed them to the eatables.

When Kent, the bookworm, buried his face in the dear volume, and shut out all the world beside, she found out what he was reading, and, just as much as her busy life would allow, read with him.

When Jimmy began to work among the bees, she armed herself with veil and gloves, and went with him. And she has read so intelligently the books and magazines concerning the honey-bee—she has studied so carefully its habits—that she is very good authority on the way of making it profitable to its owner. So that it is certainly true that Mr. Green owes much of his present standing in the profession, and his success financially, to his best friend—his excellent mother.

Mr. Green is not a man of one idea solely, nor does he believe in moving in the rut of one's own business. As an extensive and successful bee-keeper, he has been honored by his brethren with the vice-presidency of the Northwestern Bee-Keepers' Association, and it is needless to say that he fills the office well.

A Justice of the Peace in his native town, his office gives him the power to bind in one two loving hearts.

A graduate of the Ottawa High School, he has supplemented an excellent education by a course of careful and valuable reading. A lover of, and also a judge of first-class poetry, Mr. Green has many an apt quotation at his tongue's end, and he gives them on suitable occasions with point and grace.

This love of choice and thoughtful reading led him very naturally into the Chautauqua Literary and Scientific Circle, of which he is a very faithful and conscientious member. He belongs to the class of 1892, and has for some years been the President of the Ottawa Laurels, C. L. S. C. Mr. Green is an enthusiastic amateur photographer, delighting in flash-light pictures, in which branch of photographic art he has made some good hits, and is marching onward to perfection.

Best of all, he is a quiet, earnest, working, every-day Christian; a member of the Congregational church in Ottawa, and President of the Young People's Society of Christian Endeavor, he is letting his "light shine before men."

Take him all in all, and viewed through the medium of other eyes more impartial than those of a cousin, James A. Green, beside being a live, progressive bee-keeper, is undoubtedly a very nice young man.—LYDIA STRAWN, Ottawa, Ills., in *Gleanings*.

Making Ready for the Fair.

—Chicago is already catching step to World's Fair music, says the *Post*. While the transformation of Jackson Park into a pleasure ground for the world is rapidly going on, and the ways and means of making the Exposition the event of the century in World's Fair matters are being daily elaborated, the city itself, aside from World's Fair work proper, is making ready to receive. The plans for connecting and improving the boulevards and parks are waiting the golden touch to put them into execution, the bills for that purpose having passed the Legislature.

Chicago never does anything by halves, or in a faint-hearted way. What man has done man can do, is one of her cardinal maxims, and having begun to brighten up in appearance in the business district, the work will go on until in 1892 and 1893, the whole city will be in gala attire.

The Bees are a-humming.

The summer is coming;

And soon with the roses the zephyr will flirt.

Don't be Afraid.—Too little advertising is like sowing too little seed. A farmer in planting corn puts a number of grains into each hill, and is satisfied if one good healthy stalk comes from each planting. It is the constant advertiser that is bound to attract attention. It is the succession of bright, catchy advertisements that refuse to be ignored. That the proper time must be allowed for the fruit to grow, ripen, and be gathered, is as true as that wheat cannot be reaped the day after it is sown.—*Printer's Ink*.

The World is a looking-glass, and gives back to every man the expression of his own face. Frown at it, and it will in turn look sourly upon you; laugh at and with it, and it is a jolly, kind companion. And so let all young persons take their choice.—*Thackeray*.

Thinks He Knows it All.

MARY P. SAWYER.

Our neighbor Smith is a good old man,
 But he thinks he knows it all.
 He'll teach everybody whenever he can,
 For he thinks he knows it all.
 He knows the weather a year ahead,
 He's wiser than all the books that are read
 And all the time, whatever is said,
 He thinks he knows it all.
 He'll talk all day, and he'll talk all night,
 For he thinks he knows it all.
 Some folks may be wrong, but he's always
 right.
 And he thinks he knows it all.
 Coronado.

Queries and Replies.**Old Pollen in the Combs.**

QUERY 766.—1. Have you positive evidence that bees will remove old pollen when the room is needed for the queen? 2. Having such combs, in what part of the hive would you place them? 3. At what time of the year?—Illinois.

1. Yes. 2. In the center. 3. When needed.—A. B. MASON.

1. I think so. 2. Near the center of the brood-nest.—J. M. HAMBAUGH.

I have no positive evidence that they will do it for this purpose.—H. D. CUTTING.

1. Yes. 2. In the brood-chamber. 3. When the queen is laying rapidly.—J. P. H. BROWN.

1. Yes. 2. In the center of the brood-nest. 3. Any time, when they are needed.—M. MAHIN.

1. Yes. 2. In the center of the brood-nest. 3. In the Spring, or during the Summer.—G. L. TINKER.

1. Yes. 2. In the same place that I would if they contained no pollen. 3. Whenever needed.—R. L. TAYLOR.

1. They will remove it when needed. 2. On one side of the brood-nest. 3. In the Spring, when breeding is rapid.—A. J. COOK.

1. Yes, if it is not as "hard as a rock." 2. Put such combs in the center of the brood-nest, one at a time.—C. H. DIBBERN.

1. No. 2. Leave them where they happen to be, if already in the hive; otherwise put them at the side of the brood-nest.—C. C. MILLER.

1. I do not think we have; at least I have no *positive* evidence of the fact. 2. I should place them side by side with the combs the queen was using for eggs.—J. E. POND.

1. Yes. 2. Place them in the brood-nest. 3. Whenever the temperature is high enough, and brood-rearing is in progress to considerable extent.—JAMES HEDDON.

1. Yes. 2. In the part most convenient of access. 3. Early in the season would be best, but later in the season if you have the combs, and use for them.—MRS. L. HARRISON.

1. Yes; though in some cases they have to nearly destroy the comb to get rid of it. 2. I do not know but that it would be economy to melt them for the wax; but if you wish the bees to clean them out, put them in the center of the brood-nest. 3. In the Spring.—EUGENE SECOR.

If the pollen is musty, cut it out in the Spring, leaving the septum. If it is good do not care for it, the bees will eat it. If one colony, after having been queenless, has several combs encumbered with pollen, exchange these combs for others taken from colonies short of it.—DADANT & SON.

1. Yes. If the pollen is fresh and good it will be used for brood; if not, it will be taken from the cells (even if the combs have to be gnawed down to do it) and tumbled out of the hives. 2. If in June, in the center. If at any other season of the year, at the sides. 3. Use them at any time of the year you wish to.—G. M. DOOLITTLE.

1. Yes. I have had them to remove the pollen when it was so hard and dry that the bees had to cut the comb down to the septum to get the plugs of pollen out, and afterwards draw out the cells. 2. Place them next to the brood. 3. After breeding commences in good earnest in the Spring, soak the pollen-filled combs in luke warm water for a quarter of an hour (have the water sweet enough to make it palatable), then hang in the brood-nest, next to the brood. Only one or two combs must be given to a colony at a time.—G. W. DEMAREE.

1. Yes; the bees will remove it unless it is too hard. If it cannot be readily removed by the bees, you should cut it out down to the septum. 2. They may be put in the brood-nest, or left anywhere in the brood-chamber. 3. In the Spring or Summer.—THE EDITOR.

MAY FLOWERS.

JULIA GREY BURNETT.

It was a morning in the Spring,
 When nature had aroused from sleep
 And listened as the love-birds sing
 Their matins, and their trystings keep.
 The woods were decked in rich attire,
 The fields were fair, the meadows green,
 The hills beyond, the mountains higher,
 Were gaily dressed to hail their queen.

The atmosphere seemed full of life
 And glad delight at Spring's return;
 No breath of envy, discord, strife,
 From bird or leaf-bud, flower or fern.
 The woods were so inviting fair
 To me on such a lovely day,
 I bade adieu to work and care,
 And hasten'd to their shades away.

I knew where Quaker-ladies grew,
 Timid, half-hiding from the light;
 And where to find the violet blue,
 The star-flower with its eye so bright.
 The daffodils in green and gold,
 Nodding and smiling at the sun,
 As if they knew a tale untold
 To mortal since the world begun.

Here on this slope the sunlight streams
 Through leaves of green, and branches gray;
 I lightly tread where love's fond dreams
 Have passed the happy hours away.
 Not that I would have listened long
 Could I have heard each word they said—
 But he was bright, and young, and strong,
 And ardently his cause he plead.

I easily could guess the theme,
 For blushes pink were on her cheek,
 And in her eyes the lovelight beam
 Disclosed the Spirit pure and meek.
 Unconscious they of strangers near,
 Or anything to mar their bliss;
 Their whisperings I could not hear—
 But, ah! I'm sure that was a kiss!

Well—this was love's Spring holiday,
 When time sped by on winged hours;
 And could I, passing, grave or gay,
 Have noticed less these bright May flowers?
 She like a dainty, fairy Queen,
 And he of wildwood flowers the King;
 I left them on their carpet green,
 With brook and birds their songs to sing.
 Washington, D. C.

Topics of Interest.**Rearing Queens from Eggs or Larva.**

DR. G. L. TINKER.

The best way to rear queens is as follows: Take away the queen and all of the brood, of any colony in good condition, and give empty combs and a comb of honey. Cage the queen, and place her upon the frames.

The next day take away the queen and give them a frame prepared as follows: Take an empty frame, or a frame of empty comb, and remove the bottom-

bar. Nail in a strip one inch wide between the end-bars, about $1\frac{1}{2}$ inches from the bottom, so that there will be a 2-inch space between the bar and the bottom of the hive in which to have the cells built. Next, select a strip of comb 2 inches square, containing eggs from the queen it is desired to breed from. Cut up into strips of cells, and cut off one-half of the cells on one side of the septum of the comb. Cut these strips up into single cells, each containing an egg—it is not objectionable if some of the cells contain eggs just hatched, but no cell should be used that has a larva large enough to be seen.

Now, turn the frame bottom up, and with a small camel's-hair brush, drop a little melted wax on the cross-bar, and set at once one of the prepared cells in the melted wax, so it will point downward when placed in the hive. Put in 15 or 20 cells in this manner, and then put at once in the prepared colony.

If honey is not coming in, feed well for five days, and a finer lot of queen-cells will never be made through natural swarming.

On the twelfth day cut out the cells and hatch in Alley nurseries, then place in fertilizing hives, introducing them with a little tobacco smoke.

If the cells, after being completed, are taken away from the colony and put in an upper story of any colony above a queen-excluder, we may then take the broodless combs and exchange with the combs of any other colony, giving them prepared cells in the same way. It is not best to allow any colony to build more than one lot of cells, as the second time they will not often complete more than two or three of all the cells given.

The above plan of queen-rearing was first made known at the Convention of Ohio State Bee-Keepers, at Columbus, in 1888. It is a modification of the Alley system, and nothing better can be desired.

There is, however, another point to be considered by those who are desirous of improving their bees. It is the rearing of vigorous, long-lived and prolific queens. A queen that has been exhausted by egg laying is incapable of producing as vigorous queens as one that has been given a rest from egg laying for five or six days, or one that has not been allowed to lay to her full capacity, as when kept in a nucleus hive.

The best plan seems to be to take out the queen of a colony strong in brood and young bees, and cage her on the frames for nine days. Then exchange

her for the breeding queen, which should be caged for five days, and then allowed to liberate herself by eating away bee candy. Care, however, is required to see that at the expiration of nine days no queen-cells are left in the hive before exchanging the queens.

A colony so prepared will feed the new queen abundantly, and all the first larvæ that hatch, which are the only suitable larvæ to use in Mr. Doolittle's system of queen-rearing. However, I prefer to rear queens from the egg, or larvæ just hatched, and would select the first eggs laid by the queen treated as above advised. Should any of the eggs hatch before removal for queen-rearing, we may be sure that the larvæ will be suitable for queen-rearing until they are a day and a half old. The rearing of queens from larvæ under any other circumstances is strongly disapproved of.—
Read at the Ohio State Convention.

How to Handle the Frames of Hives.

C. A. HATCH.

That every bee-man is not proficient in handling frames of even his own hives, I was convinced by acting as judge at our State Fair a few years since. A premium was offered for best method of handling bees; and, as I now remember, there were four contestants, some of them veterans, and yet two of the four broke out combs or cracked them badly in handling, simply to find the queen.

Another thing that convinces me that all have not the knack of handling Langstroth frames rapidly, is, that they use metal corners, which entirely prevents rapid manipulation in looking for queens, examining brood, or any operation where single frames must be handled.

I had a talk with Prof. Cook once on this subject, and I found he used the same method as here described in instructing his bee-class, and so the method has good indorsement.

The right side of the hive is rather the best position to operate from, for then you can hold the smoker in the right hand to throw smoke into the entrance, and you can set it on the ground near by, and it is easily reached by the proper hand to use.

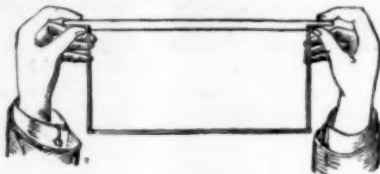
After having subdued the bees, take your screw-driver, or whatever tool is used for loosening the frames, in the right hand, handle up and thumb up, as if it were a dagger and you were going

to stab. Take the frame next to you. First loosen, by pushing the screw-driver handle from you, while the point is between the frames; grasp the frame at the other end with the thumb and fore-finger of left hand at same time, and usually the frame will be loosened. Now take the right-hand end in the same way; and as you bring it up straight out of the hive, move each thumb under the projection of the top-bar, so that its whole weight will come on the ends of the thumbs, while the fingers serve to steady it on the side from you. This brings the frame in front of you so you can examine one side. This we will call the first position, and here is where most mistakes are made.

In order to get to the next position, the bottom-bar is either brought toward the operator, or it is turned away from him until the opposite side of the frame can be examined. In either case the comb is not properly supported by the frame; and if new, and the weather warm, it is liable to drop out by its own weight. The position is also trying on one's hands and fingers, which might not be noticed on a few hives, but will tell in a trying way where it is followed all day.

There are usually but three parts of a frame to be examined, viz.: two sides and the bottom. Unless the colony is unusually strong, no bees will be on the end-bars; so all we want is three positions of the frame to have it all gone over. We have given the first, and now to get the second.

To examine the bottom, raise your right hand, keeping the thumbs in the



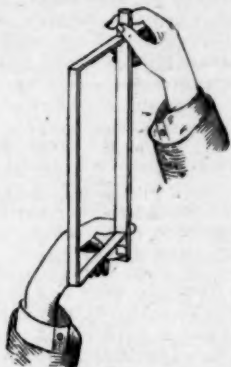
FIRST POSITION.

same position, also lower left hand at the same time, and bringing it toward you also until one hand, the right, is directly over the other, the frame standing on end. While raising your right hand, allow the bottom of the frame to swing toward you. This will give you the second position to examine the bottom.

The third position is got by allowing the frame to swing around to the left, like a door, the top-bar serving in place of hinges. After this side of the frame has been examined, you can let it swing

on around, and you have it ready to put back into the hive in just the same way it came out, so far as the frame is concerned; but you are holding the frame in an entirely different way, as it now rests on the second joint of the first finger instead of on the thumbs, the latter being on top of the frame instead of under, as at starting.

It is a kind of sleight-of-hand you have performed, but not hard to learn when



SECOND POSITION.

one sees it done, though not so easy to put on paper. It always keeps the comb in a perpendicular position, so it cannot fall out, if ever so brittle or weak, and yet every side has been toward you, and the hands have not been changed nor the frame laid down.

If you have never handled frames in this way, try it; or if any one has a better way, let him come forward and explain it.—*Gleanings*.

Ithaca, Wis., April, 1891.

Freight Classification for Bee-Keepers.

J. T. CALVERT.

What is meant by freight classification? It is the arranging of the many different commodities of every conceivable character, which are carried by transportation companies as freight, into groups or classes, as first, second, third, fourth-class, etc., a different rate being applicable to each class.

There are three main classifications, covering the whole country, applicable to almost all interstate business: The official classification used by railroads east of Chicago and St. Louis; the Western, which governs west of the Mississippi and Chicago; and the Southern,

used south of Cincinnati. An effort is being made to adopt a uniform classification for the whole country. In the official classification with which the bee-keepers of this district have to do, there are six classes; in the Western there are ten; and in the proposed uniform classification there are eleven.

Who makes these classifications? A committee appointed by the different railroads who use them.

What are goods, classified for? Why is it not worth as much to haul a car loaded with one kind of goods as another? The law makes the common carrier responsible for the goods transported, and there is more risk attending the hauling of a car of comb-honey than a car of coal, for two reasons: The honey is of many times greater value, and is also much more liable to damage; and hence the railroad company, in assuming the greater risk, charge a higher price for it, as they should. In this lies the reason for different classes of freight, which go at higher or lower rates.

The class, which is the means of indicating what rate is to be charged, is fixed by the value of the commodity and its bulk, as well as the risk in handling. This is the principle which governs the classification of goods shipped as freight.

But there are other considerations that come in, which affect the classification of a certain article more or less favorably. Strong influences, of one kind or another, are brought to bear upon the committee by different interests having "influence at court" in favor of a low class for the goods they are interested in. The railroads are, of course, anxious to keep rates as high as they can, and the public are clamoring for lower rates. As it is in legislation, some interests are favored while others are taxed to pay for it, so it is here. On the whole, the classifications are very fair and equitable, and it is only occasionally that you see an interest favored.

How does all this concern bee-keepers? There are few bee-keepers who do not have to buy more or less of what they use away from home, and they are interested in the cost of transportation in getting their supplies. Then, if they produce large crops of honey, so as to be obliged to go away from home to find a market, they want to know what it is going to cost to get their product to that market, and their profit is increased or diminished as this cost is more or less.

The present rates from Medina to Chicago are as follows: First-class, 37 cents; second, 34; third, 25; fourth,

17; fifth, 15; sixth, 12. Rates for shorter or longer distances bear about the same ratio to one another.

The commodities in which bee-keepers are more particularly interested are classed as follows at present: Beeswax, first-class; bee-comb, second-class; bee-hives set up, double first-class; bee-hives nested, first-class; bee-hives K. D., third-class; or, in carloads, fourth-class. Empty barrels and kegs are classed as follows: Ale or beer barrels go at actual weight, and third-class freight, while vinegar, cider, molasses, syrup, or other tight barrels, are called 100 pounds each, and go as second-class. Liquor kegs, actual weight, second-class. Kegs, N. O. S., actual weight, $2\frac{1}{2}$ times first-class.

Of course, you are interested in the mention of ale and beer barrels and liquor kegs, only as a comparison with the kinds used to put honey in, to show an instance of favoritism to the liquor interests. Box stuff is classed fourth, and in carloads, sixth-class; but that no longer concerns us, for railroads will not accept bee-boxes, or honey-boxes, or any other kind of boxes made in a bee-hive factory, as anything but bee-hives. Honey in glass, packed, first-class. Honey in cans, boxed, also in kegs, second-class; honey in barrels, third-class. Tin cans, boxed, first-class.

Although the Classification Committee probably intend the term bee-comb to apply to old comb before being rendered to get the wax, yet we take advantage of the term and apply it to comb-foundation, calling this, on our shipping-bills, bee-comb in sheets. When the article you are shipping is not specifically named in the classification, the rule is to class it with analogous articles and comb-foundation is more nearly analogous to bee-comb than beeswax; hence, although of greater value and risk in handling, it goes at a lower rate than beeswax.

Syrup in cans, kegs, or barrels, goes at one class lower freight than honey put up in the same way; and some have recommended billing extracted-honey as syrup, in order to get the lower rate; yet it is a questionable practice. Syrup, as a rule, is not worth as much as honey, and hence not so great an amount is at stake, and a lower rate can be made. The practice of billing bee-hives K. D., as box stuff, is perhaps alike questionable, although the difference in value is not so marked and well defined.

It is hard to see why a certain amount of lumber, cut up to form the bodies, covers and bottoms of bee-hives, should

be charged a higher rate of freight than the same amount cut into the same or much smaller dimensions, to be used as packing-boxes; yet it is no doubt owing to the fact that the frames and inside fixtures of the hives go with the outside, and thus make the whole of more value than box stuff.

About two years ago, bee-hives K. D. were classed second in small lots; and in a recent visit to Jamestown, I learned that Mr. W. T. Falconer had been before the Classification Committee, and succeeded in having the classification changed to third, and this secured quite a substantial benefit to bee-keepers.

During the past year or two traveling freight agents representing such roads as the Lake Shore & Michigan Southern; Chicago, Rock Island & Pacific; Union Pacific, and others, have visited us, and on examination of the goods we were sending out, they, with one accord, agreed that the rough, heavy parts of hives were properly billed box stuff, as we had been doing. The inspector representing the trunk lines merging into Chicago, did not agree with their opinion, and all such goods which passed through Chicago were changed to bee-hives K. D. Not long ago this was followed by instructions to the agent at Medina not to receive any more goods from us as box stuff. We then entered on argument before the Classification Committee, showing that bee-hives K. D. were of no more value than some grades of lumber in the rough, nor of box stuff, and asked for a reduction in the rate, putting bee-hives K. D., on the same basis as box stuff.

The chairman of the committee says that he will recommend putting the carload rate fifth, instead of fourth as at present, but no further change is proposed. As very few carloads are shipped, this is but very little practical gain, except to show that there is an evident desire on the part of the committee to correct injustice when brought to their notice.

As compared with many interests represented in the classification, bee-keepers have quite fair and reasonable recognition. A few interests are favored, but we can hardly hope to be among the favored ones.

In the matter of shipping comb-honey, it may be well to mention that the classification provides that, if the shipper chooses, to pay one class higher rate—namely, $1\frac{1}{2}$ times first-class, it will be taken at carrier's risk; and, if smashed or damaged, the amount of loss may be recovered. We had a case of this kind

a little over a year ago. We had had such luck in getting our honey smashed, that we advised the shipper to send at the higher rate. The honey came, over nine-tenths broken out of the sections, and we recovered over \$50 damage on about a ton lot of honey.

Much might be said on the manner of crating honey for shipment, so as to make it reasonably safe; but this is hardly germane to my subject.

It may surprise some of you to know that it costs less to send goods to New Zealand and Australia than it does to Texas, Colorado, and the far Western States. Ocean freight is so much per cubic foot, regardless of bulk or value. Bee-hives in flat, and sections packed solid, go about 100 pounds to four cubic feet. We have recently had a rate of 17½ cents per foot, New York to Brisbane, Australia, which equals 70 cents per 100 pounds, while the rate to the Pacific Coast is just four times that, or \$2.80.—*Read at the Ohio State Convention.*

Adulteration of Honey.

BYRON WALKER.

Returning home, after an absence of over a month, my attention is for the first time called to an article in the columns of the BEE JOURNAL, page 416, entitled, "Adulteration—Michigan Convention," which would seem to require some explanation on my part.

I refer to that part of the article headed, "Another Great Mistake," in which the writer, after expressing his indignation and horror, because of the resolutions passed by our late State Convention with reference to the adulteration of extracted-honey, and his conviction that it did not represent "the sober second thought, sense and knowledge of the convention," undertakes, by means of quotations from letters written by its leading members, in reply to inquiries addressed to them in relation to this matter, to show that he was correct in the conviction referred to, and that consequently, "there was no foundation whatever for the passage of that resolution." "That the allegation of that resolution is utterly and completely disproven," etc., etc.

In conclusion, the writer gives some apparently excellent advice as to how to proceed in punishing, by process of law, these adulterators and sellers, whom he has already proven, to his own satisfac-

tion at least, to have only an imaginary existence.

Now, I do not propose, at this time, to enter into any lengthy discussion of this question, for the reason that I am too busy preparing to move my family to Wisconsin—where we will reside for the Summer—to spare the time, had you the space for publishing the same.

Besides, as the editor of the *Review* has seen fit to make this matter of honey adulteration the special topic for this month, I prefer to give what time I can spare in this direction to presenting my views at that time.

It requires but a glance at the letters referred to above, to show that if any body is to blame for the passage of the resolution in question, I am that one. Further, that while I, of all concerned, was the one to furnish your correspondent with the information desired, I wholly failed in doing this, notwithstanding repeated requests by letter.

My excuse for not doing so is simply this: The first letter, directed to me at Capac, was not received, owing to my absence from home, until over a week after it was written; and as the second one (which also reached me about this time) purported to be a copy of the first one (and sent because the first one had not been answered), whereas it was wholly unlike the first one (see BEE JOURNAL, page 417), and not having the slightest acquaintance with Mr. S., was led to suspect that his motives in seeking the information were not above criticism, and so paid no attention to either letter.

It will be noticed that in the first letter Mr. S. stated that he was a bee-keeper who simply wanted to get samples of the "stuff" in order to convince his customers that he was selling a pure article; while in the second one (which I repeat he stated was a duplicate of the one previously sent) the object of the writer, who professes to have had experience as a public prosecutor in such cases, was to get information that would enable him to secure the conviction of the offending parties.

Now, if Mr. S. is not willing to believe the testimony of Mr. M. H. Hunt as to the existence of large quantities of adulterated honey on the Detroit market, it is not likely that anything that I can say will convince him of the truth of the statement. I will repeat, however, for the information of others, what I stated before the convention: That I found several wholesalers and retailers of such goods in that city, and also that I found numerous grocers handling the same goods in other cities of the State, where

I had marketed honey. These mixtures are commonly put up in jelly glasses, variously labeled—"White Clover Honey," "California Honey," "Michigan Honey," or "Florida Honey."

One specimen of that more often met with than any other, was sampled by the members of the convention; and I believe even the most skeptical were convinced that it was chiefly glucose. Another sample, put up to sell to the fancy grocery trade, I had analyzed by Health Officer Duffield, formerly State Chemist, who pronounced it a clear case of adulteration, with the same substance.

Right here, allow me to say, that I utterly fail to see the point Mr. S. would make when he asks the question: "Is an article that does not taste like honey an adulteration?" In reply, I would ask, if it is labeled and sold as honey, is not the *injury* done, to all concerned, in an inverse ratio to the amount of honey it contains?

Mr. S. would not have members of the convention sheltering themselves behind the Bee-Keepers' Union; but rather have those who know of any dealers selling such goods, make complaint to the proper prosecuting attorney, etc.

Well, previous to our convention, I laid this matter before the prosecuting attorney of Wayne county, calling his attention to the statute of 1885, which Mr. S. refers to. He informed me that, like the Sunday-closing law, this one was practically a dead letter, as the fine for the first offense was so small (\$15 to \$25), and no imprisonment being provided for in case of non-payment. Besides, in order to secure the conviction of the offender, it is necessary to *prove* that he *knows* the goods sold to be adulterated—a most difficult thing to do, as these goods are commonly furnished by some other party, who, in turn, gets them of some firm who is supposed to put them up.

Now, suppose one should finally succeed, after repeated adjournments, in convicting the manufacturer. The fine imposed on him would be but a drop in the bucket compared with the profits of the business, and, of course, the traffic would go on just the same, while the expense of such prosecution (to a person away from home) would, under the circumstances, be apt to be a greater burden than any one bee-keeper should be expected to bear for the benefit of the bee-keepers of the State; for Detroit is the honey market of the State. But let the Bee-Keepers' Union take hold of the matter, and the expense would be but a trifle to any one individual con-

cerned, and repeated convictions, with the imprisonment that would be likely to follow, would speedily put an end to the business.

In conclusion, allow me to say, that after Mr. S. has spent as many days as some members of the convention have weeks, and as many dimes as some that I could mention have dollars, in ferreting out and fighting this fraud, he will no doubt be better qualified to criticize the actions of its members.

Capac, Mich.

[Both Mr. Smith and Mr. Walker having been heard on this subject, we shall decline to publish anything further regarding the matter of the resolution passed at the Detroit Convention.—ED.]

Popular Errors Regarding Bee-Keeping.

C. A. HATCH.

Perhaps there is no branch of rural industry on which the popular idea is more at fault than bee-keeping.

This is partly owing to the fact that all the operations of the bees are covered from inspection by the hive in which they live, and partly by the efforts of the bee-keepers themselves to throw mystery and witchery about the whole business, so as to add extra flavor to their success, and, perhaps, in some cases to deter others from entering the same field by creating the impression that some kind of a charm, or charmed life, was necessary to success.

The fact is, that there are but few things about it which are to the modern bee-keeper mysterious; and as for the charm, witchcraft, etc., these have all departed, with the rattling of the cow bells to settle swarms, years since.

But, aside from these, there are several things on which the popular mind is at fault; not from any lack of light on the subject, but simply because old impressions have remained, and the public has not cared enough about it to look the matter up.

FEW HONEY FLOWERS.

As to flowers, the popular notion is that every flower secretes nectar, whereas the number that really do secrete honey in sufficient quantity to be available for the bees, is comparatively few. Only to those to which insects are necessary for fertilization, has the All-wise Father seen fit to give this inducement to the bee to visit its

honeyed depths. Can we, then, doubt that the nectar is only put there as an inducement to the bee to visit the flower and perform this all-important office of fertilization.

THE QUEEN NOT A SOVEREIGN.

The queen is, by popular consent, regarded as the head or governing power of the colony, when she is more of a subject than a sovereign. In fact, the hive is a republic pure and simple, in which public sentiment decides all things, and patriotism and devotion to the general good, regardless of private claims, is the highest ideal; each individual giving herself up with untiring devotion to public-service, not even hesitating to offer her life as a willing sacrifice when the general good seems to require it.

This is not a spasmodic or short-lived sentiment like our Fourth of July patriotism, but an all-absorbing; life-long devotion, her whole life being one continual round of labor to preserve order, feed the dependent, keep everything clean and neat, and store up a surplus—not that she may enjoy ease, but that the coming generations may have plenty.

Contrary to popular belief, the old queen goes with the swarm, and all the old bees at that time in the hive. Bees live but a short time, in Summer but from four to six weeks, instead of from year to year, as some suppose.

A bee stings only on the defensive, popular opinion to the contrary notwithstanding; but is no respecter of persons. A may be the offender, but B gets the penalty if he happens to be near just then.

The hive is more for man's accommodation than for the bees, as they will, other things being equal, store as much in a hollow tree, soap-box, or any other hollow receptacle, as in the most elaborate patented hive. So, remember this next time a bee-hive vender, selling "rights," comes along.—*Read before the Wisconsin Agricultural Society.*

Robber Bees in Spring.

Robbers sometimes "clean out" a weak colony in Spring. Whatever you do, do not take a hive away, that the robbers are at work on. If you do, they will only attack a neighboring colony. Take most of the contents out of the hive, but leave at least one comb with a little honey to finish. If you must take the hive away, put another in its place, with something for the robbers to work on.—DR. C. C. MILLER, in *Gleanings*.

CONVENTION DIRECTORY.

Time and place of meeting.

1891.
May 19.—Northern Illinois, at Guilford, Ills.
Chas. S. Winn, Sec., Box 1854, Rockford, Ills.
May 26.—Cortland Union, at Cortland, N. Y.
M. H. Fairbanks, Sec., Homer, N. Y.
June 2.—Des Moines County, at Burlington, Iowa.
John Nau, Sec., Middletown, Iowa.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—P. H. Elwood.... Starkville, N. Y.
SECRETARY—C. P. Dadant..... Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon... Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Bee and Honey Gossip.

Chilled Brood.

To-day the mercury is down to freezing, and snow is falling. I expect considerable brood will be chilled in this locality. Shall commence the season with 175 colonies. S. J. SNYDER.

Venice Centre, N. Y., May 5, 1891.

Join the Union.

I think it the duty of every bee-keeper to support the Union, in order to defend our rights, and secure justice to persecuted bee-keepers. My loss has been 10 colonies out of 40, during the Winter, from lack of stores. FRED SMITH.

Van Meter, Iowa.

Anticipates a Bountiful Crop.

I examined a few colonies of my bees to-day, and am agreeably surprised to find them wonderfully strong in bees, with plenty of drones, and queen-cells just ready to be capped. My bees, in point of numbers, are at least four weeks ahead of last year, and they have had warm, dry weather to work on the peach and plum bloom. The apple is now in full bloom, and the bees are making the most of it. Last year the apples bloomed in this latitude May 10;

this year, early apples bloomed April 24, so you see it is not surprising for bees to be in fine condition. If the weather is favorable, I shall have some swarms in ten days. White and alsike clovers are looking splendid, and the outlook is encouraging for a bountiful honey crop. My bees wintered on the summer stands with very little loss.

I. J. GLASS.

Sharpsburg, Ills., May 5, 1891.

Help the Bees.

At present, I have 12 colonies of bees, having lost 2 colonies during the Winter. My bees are doing very well; some of them having their brood-chamber full of honey, and hanging out. I think it almost too early to give them sections, as I am not working for extracted-honey. Would you give them more room? The white clover is not in bloom yet, but they are gathering honey from fruit bloom.

JOHN H. ROHRER.

Tippecanoe City, O., May 4, 1891.

[If the bees are hanging out, and have no place to store honey, give them sections, and in that way assist them to gather all the honey they can.—Ed.]

Plum and Cherry Bloom.

In the Spring of 1890 I had 5 colonies, which increased to 14 by natural swarming. November 1 I put them in the cellar, and on taking them out, April 6, found that 2 colonies had starved to death, and one colony had been destroyed by mice, but the 11 colonies remaining were in good condition. At this date they all have brood hatching, and 3 colonies have begun work in the sections. I expect some early swarms this season. Plum and cherry trees are in bloom, and the bees are working like niggers to get all the nectar out of them. I expect to increase my apiary to 300 colonies, as it is my intention to engage in the business for profit. Working among bees is to my taste. I think the Italians are far ahead of all other bees. There will be 150 acres of flax sown within a half mile of my apiary, and I wish to know if bees gather much honey from flax-bloom.

S. F. BURRIS.

Wichita, Iowa, May 4, 1891.

[Flax is not much visited by bees until late in the Fall, when better honey-producing plants are scarce. The nectar is bitter and pungent.—Er.]

Experience of a Beginner.

I have invented a bee-hive the past Winter, and expect to have it patented. My claim for it is big. I am going to give it a thorough trial. I have already transferred a colony to one of them, and shall have six on trial this season. It is an expanding and contracting hive, a queen-restricting hive, a hive for the production of extracted-honey and comb-honey at the same time; and I also claim it will be non-swarming. It is very simple, easy to manipulate, and can be manufactured as cheaply as any two-story hive. I bought the material for the first hive I made, each thing separate, and the cost was 50 cents, painted and complete. When I have more time—say, in a month or so—I will make a model and send it to you, with a full description.

T. O. H.

Jones County, Iowa.

Questions by a Bee-Keeper.

1. Where bees are wintered on the summer stands, is it best to use a cap on the top of the brood-chamber to hold absorbents? 2. Is a super made of $\frac{3}{4}$ -inch lumber a sufficient protection for the sections during the honey harvest, or should such a super be covered with a cap? 3. What is the proper width, in the clear, for an 8-frame Langstroth hive? 4. Where closed-end frames are used, should there be a bee-space back of the ends, or should the ends of the frames fit close to the ends of the hive?

Le Claire, Iowa. MARION MILLER.

[1. Yes.

2. Yes; it is usually made of thin lumber.

3. It is $11\frac{1}{4}$ inches.

4. They should fill the space, but should be loose enough to be easily lifted in or out.—Ed.]

Nectar, a Correction, Etc.

I observe that Prof. Cook writes unguardedly sometimes. On page 53 of *Gleanings*, 1890, he says: "Nectar is cane sugar dissolved in water." Literally his expression conveys the idea that cane sugar may be dissolved in water to make nectar—that sweetened coffee is nectar! I give the sentence a different version. Fairly interpreted, the meaning is that the saccharine principle, or matter, contained in nectar secreted by honey-producing plants, is identical with

that developed in sugar cane. Besides the saccharine matter in nectar, there is mucilage and acid, etc., which, as yet, chemistry has not separated—there being no occasion for it, as with cane juice. On page 578 appears one of my unguarded expressions, which is construed into a very different meaning from that which I intended to convey. I stated that, "Prof. Cook has not broached the subject of the origin of foul-brood." I was well aware that the Professor has held that foul-brood is a germ disorder. In this we have agreed. The points I wrote about were concerning the origin proper—where, when, and how do the germs originate? I hold that the germs—the microbes—originate incidentally by means of fermentation—fermenting of dead brood. The originating of the micro-organisms has been the issue in which Prof. Cook has not joined so far as I know. C. J. ROBINSON.

Richford, N. Y.

Bees Storing Honey Very Fast.

Bee-keepers here are greatly discouraged on account of the poor market for their product. Sales are slow, for nice comb-honey in sections, at 10 cents per pound. Our bees did well last year, but the drouth began just as the bees had filled their hives, and only about one-fourth of a crop was secured on account of the bees robbing as soon as their honey was broken. A number of colonies died from neglect, and the moths destroyed many more early in the Spring. Swarming is about over, and harvest has just begun, and unless it rains soon, we shall not be able to take any surplus honey this year, but bees are storing honey very fast, and we are hoping for rain. Should our hopes be realized, there will be more honey produced here this year than ever before.

A. W. LAMKIN.

Cotulla, Tex., May 4, 1891.

Beats all Previous Records.

Bees are booming, and the weather is all that one could wish for queen-rearing. The usual time for starting cell building is May 8, but there are now no less than 100 capped queen-cells in my apiary. Will commence to mail queens by May 20. The season beats all previous records, the colonies being strong enough to swarm, and gathering honey each pleasant day. HENRY ALLEY.

Wenham, Mass., May 2, 1891.

Wind-Flower.

I send you some specimens of a flower that grows in great profusion on the prairies here. It is an excellent honey plant. Will you kindly name it for me through the columns of the BEE JOURNAL, giving the common, as well as the Latin name. It is known here as the crocus flower. MRS. M. N. STANLEY.

Adrian, Minn.

[I am very glad to send the name of the flower which interests Mrs. M. N. Stanley, of Adrian, Minn. It is the prairie wind-flower, or anemone. *Anemone patens* var. *nuttalliana*, of Gray. It is a handsome purple flower, and more showy, though no prettier, than our eastern anemone, *A. nemorosa*. Mrs. Stanley says it is known in Minnesota as the crocus. This is not strange, as the name would be suggested by the form of the flower. It is interesting to know that we may add this to the rich array of honey plants in our American flora. This flower belongs to the crofoot family, and so is related to the peony, larkspur, columbine (so rich in nectar), buttercup, cowslip, meadow rue, liverleaf or hepatica, and Virgin's bower or clematis. Few of these, however, are remarkable as honey plants.—A. J. Cook.]

Hives for Wintering.

On Nov. 4 a good colony was prepared for the cellar, its weight being 42¼ pounds; on April 17 it weighed 33 pounds. I shall weigh it again, or examine it with a view to taking away some of the old honey. To prepare the hive, make holes at right angles with the entrance, if the bottom-board is fast, and raise up the frames by placing strips on the rabbets. If the bottom-board is detachable, make the holes in a rim, on which the hive is to stand; the object being to secure more ventilation at the bottom—none is necessary at the top in cellar wintering. To-day I found a colony queenless, with not a sign of any brood having been in the hive. The colony is extra strong, with plenty of honey.

JOHN A. KING.

Mankato, Minn., April 28, 1891.

Supply Dealers should write to us for wholesale terms and cut for Hastings' Perfection Feeders.

Wavelets of News.

Wax Secretion.

I have a theory of my own as to when and why bees secrete wax. They secrete wax whenever they have more honey than they have combs in which to store it away. At such times they have to hold their honey in their sacs—they have no other place to put it. The wax is secreted as a consequence of holding the honey in their sacs. Now, this is the whole sum and substance of wax secretion. Give a swarm of bees a full set of empty combs, and will they secrete wax? No, not much; but give them an empty hive when honey is plentiful, but no combs, then the secretion goes on rapidly. Why? Because the bees' sacs are full of honey, and they have to hold it until combs are built to store it away.

Another case: Hive a swarm in an empty hive when there is a dearth of honey. When the bees have to eat all the honey they can get to keep alive, will they secrete wax? Not any. They have no honey in their sacs. I hived a swarm last September—a good sized one and they lived until cold weather, but never built an inch of comb—then starved. Why did they not secrete wax? No honey.

I have seen it stated in bee-periodicals that only young bees secrete wax. Now, I think that is a mistake. I have no doubt that young bees do secrete wax; but that they never secrete wax after they are old enough to go to the fields and gather honey is not so. I know that bees will secrete wax and build combs until they are six weeks old. Can I prove it? Yes.

Several years ago a bee-man near here hived a swarm of bees in a frame hive that I sold him. Just 21 days after, they had filled the hive full of combs, and a set of boxes with honey, and swarmed. That day the swarm was put into another hive, and they filled that hive also, in three weeks. Now, do you not see that this last swarm of bees were at least a part of the first swarm? or, in other words, every bee in the last swarm was one of the first swarm, and was not less than 21 days old, and they could not get young bees in the second hive in less than 21 days more? So the same lot of bees were secreting wax and building comb for six weeks.

I believe that, as long as a bee lives, it can secrete wax and build comb with it, and that old bees can secrete wax as

freely as young ones, and that wax is never secreted to any amount unless the bees have to hold their honey for the lack of room to store it away, and they cannot secrete wax unless they are holding honey in their sacs.—E. FRANCE, in *Gleanings*.

Standard for Honey Exhibits.

At the convention in Albany, the desirability of a standard of comparison in awarding premiums on bees at Fairs and Expositions was touched upon. It is a good idea, and I have long thought that a similar standard, or scale of points, should be furnished the judges of honey at such exhibitions. Better justice would be done exhibitors, awards being many times made without intelligent inspection. That is to say, they are made (with the best of intentions on the part of the judges) in an off-hand manner.

A case in point occurred at a State Fair. After an award had been made upon a specimen of comb-honey, some of the other exhibitors decided to examine it, when it was found that the case contained a few sections of white honey, while the remainder was dark and inferior. The case was closed, and nothing, so far as I am aware, was ever said; but certainly the superficial examination of the judge resulted in injustice to exhibitors of better honey.

If the idea should meet with approval, it is perhaps not too late to induce officials to put it into the premium lists of Fairs and Expositions to take place during the coming Summer and Fall. Brought thus to the notice of bee-keepers, it would have an educational value, the effect of which would appear in the better grading of honey for market. I submit the following scale for amendments:

| | | |
|--------|---------------------------------|----|
| HONEY— | { Color, 5. | |
| | { Body, 5. | |
| | { Flavor, 5 | 15 |
| COMB— | { Straightness, 5. | |
| | { Color of capping, 5. | |
| | { Completeness of capping, 5 .. | 15 |
| | Uniformity | 10 |
| | Style | 10 |
| | POSSIBLE | 50 |

By "uniformity" is meant the closeness of resemblance in the sections composing the specimen. "Style" includes the attractiveness of section and case, also absence of propolis.—EMILY E. WEST, in *Gleanings*.

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If you have a desire to know
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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

| | Price of both. | Club. |
|--------------------------------------|----------------|-------|
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| Canadian Bee Journal..... | 1 75.... | 1 65 |
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Bee-Keeping for Profit, by Dr. G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted-honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25c.

Clubs of 5 New Subscriptions for \$4.00, to any addresses. Ten for \$7.50.

HONEY AND BEESWAX MARKET.

DETROIT, May 11.—Market entirely bare of comb-honey, which is quoted at 14@15c. Extracted, 8@9c. Beeswax firm, at 20@30c. M. H. HUNT, Bell Branch, Mich.

NEW YORK, May 9.—Market is bare of comb-honey. We quote: Extracted, buckwheat, 7@7½c; California, in good demand, at 7@7½c, and market well supplied; Southern none in market. Beeswax, scarce at 27@29c. HILDRETH BROS. & SEGELKEN,

28-30 West Broadway.

KANSAS CITY, May 11.—The demand is light for all kinds of honey, especially extracted and 2-lb. California comb. We quote: White 1-lb. comb, at 16@18c; dark, 12@14c; white, 2-lb. comb, 12@13c; 2-lb. California and Extra California comb, 10@12c. Extracted, 6@6½c. No Beeswax in the market.

CLEMONS, MASON & CO.,

28-30 West Broadway.

CINCINNATI, May 11.—There is fairly good demand for both comb and extracted-honey, with fair supply. Comb-honey, 14@16c for choice, in a jobbing way; extracted, 6@8c.

Beeswax is in good demand at 25@30c for good to choice yellow.

C. F. MUTH & SON,

Corner Freeman & Central Aves.

CHICAGO, May 11.—Demand for both comb and extracted honey increasing, and our stock is light. Can use shipments to advantage. 1-lb. sections, 16@18c; 2-lbs., 14@15c; extracted, 7@8c. Beeswax, 30c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, May 11.—Fancy white 1-lb. comb, 18c; fair to good, 17c; dark 1-lb., 14@15c; 2-lb. white comb, 15@16c; 2-lb. dark, 13@14c; extracted, white, 7c; dark, 5@6c.

HAMBLIN & BEARSS, 514 Walnut St.

CHICAGO, May 11.—Very little comb-honey being sold; prices are about the same, with really very little fancy goods offered. Best white comb, 17@18c; extracted is steady, at 7@8c, for that which is in good condition. Beeswax, 28c.

R. A. BURNETT, 161 S. Water St.

BOSTON, May 9.—No change in prices of honey; sales a little slow, on account of extremely low price of maple sugar. White, 1-lb. comb, 18@20c; fair to good, 18@19c; 2-lb. sections, 16@17c. Extracted, selling at 7½@8½c. No beeswax on hand.

BLAKE & RIPLEY, 57 Chatham Street.

ALBANY, N. Y., May 9.—The honey market is slow, with small stocks of comb. We quote: clover, 1-lb. comb, at 15@16c; buckwheat, 12@13c. Extracted, light, slow at 7@8c; dark, firm at 6@7c. Beeswax, 25@27c.

H. R. WRIGHT, 326-328 Broadway.

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Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To exchange for about 25 lbs. of Bees, tested Queens, either 3-band or 5-band Italians, to be sent in June. Will give one tested Queen for every pound of bees, any race, sent me, charges paid. If you can spare them and desire a Queen, send bees at once and drop me a card. **JACOB T. TIMPE**, Express and P.O. address, Grand Ledge, Mich. 19Atf

WANTED—A steady, sober and industrious young man for general farm work, all the year round, at \$30.00 per month and board; or a young couple at \$45.00 per month and board. Correspondence invited with anyone desiring to come to California, to make it their home. **F. M. HART**, Travers, Tulare Co., Calif. 20A1t

Appreciated When Seen.

I put my "Globe" bee-veil on exhibition at our convention at Greenville, Texas, on April 1 and 2, and it was the cause of considerable admiration. Greenville, Tex. **W. R. GRAHAM**.

Well Satisfied.

I would not do without the **AMERICAN BEE JOURNAL** for anything. It is the best and cheapest publication on bees and honey that I know.

THOMAS FOREACRE, Marshallton, Del.

The **Convention Hand-Book** is received, and I am well pleased with it. Every bee-keeper should have a copy.

CHARLES WHITE, Farmers' Valley, Nebr., Mar. 3, 1891

Convention Notices.

37 The next convention of the Northern Illinois Bee-Keepers' Association will be held Tuesday, May 10, at the residence of Russell Marsh, in Guilford, Ills. **CHAS. S. WINN**, Sec., Box 1854, Rockford, Ills.

38 The Spring Meeting of the Cortland Union Bee-Keepers' Association will be held at the residence of President J. H. Kennedy, 126 Groton Ave., Cortland, N. Y., on Tuesday, May 26, 1891. A special invitation is extended to the ladies. All interested are invited. **J. H. KENNEDY**, Pres. **M. H. FAIRBANKS**, Sec., Homer, N. Y.

39 The Des Moines County (Iowa) Bee-Keepers' Association will meet at the Court House, in Burlington, Iowa, on Tuesday, June 2, 1891, at 10 a.m. It is intended to organize a Southeastern Iowa Association. All interested in bees and honey are cordially invited to attend.

JOHN NAU, Sec., Middletown, Iowa. **GEO. BIECHOFF**, Pres., Burlington, Iowa.

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